

APPENDIX D

STREAM TEMPERATURE DATA 2001-2003

Table D-1. 2003 Temperature Summary Data

Site Name	Latitude	Longitude	Start Date	Stop date	Seasonal Maximum		Seasonal Minimum		Seasonal Max ΔT		7-Day averages					
					Date	Value	Date	Value	Date	Value	Date	Maximum	Minimum	ΔT		
233641-Flat Rock Creek At Mouth	47 25.443	115 38.260	06/26/03	10/06/03	10/06/03	82.4	10/04/03	40.0	10/06/03	40.4	07/20/03	61.1	50.8	10.3		
233682-Ward Creek-Upper			06/27/03	10/06/03	10/06/03	82.9	10/04/03	43.8	10/06/03	37.7	07/25/03	56.3	52.4	3.9		
233683-S. FK Little Joe Above Mouth			06/26/03	10/09/03	06/26/03	73.1	07/04/03	44.4	06/26/03	27.9	10/06/03	56.8	51.8	5.0		
472546-ST Regis Above Ward Creek			06/27/03	07/20/03	07/20/03	70.4	07/04/03	48.5	07/20/03	18.6	07/17/03	67.0	52.2	14.8		
480933-Savenac Cr. Above Nursery			06/26/03	07/17/03	07/17/03	64.4	07/04/03	46.7	07/15/03	12.6	07/14/03	62.4	51.2	11.2		
530205-Big Sunday Creek			06/24/03	09/30/03	08/01/03	60.5	06/24/03	41.5	07/18/03	8.7	07/29/03	60.0	52.1	7.9		
530206-Silver Creek at F.B.			06/24/03	09/30/03	08/01/03	64.6	09/30/03	41.2	07/18/03	12.7	07/29/03	63.7	52.4	11.4		
530207-E FK Savenac Creek			06/25/03	10/01/03	08/01/03	53.0	06/25/03	43.2	07/18/03	3.1	07/29/03	52.6	50.0	2.6		
530209-E. Fork Twin Creek			06/26/03	10/01/03	08/01/03	56.3	09/18/03	44.9	06/29/03	5.6	07/29/03	56.0	51.8	4.2		
530210-Deer Cr Above DNRC			06/26/03	10/01/03	07/28/03	56.2	10/01/03	43.7	07/04/03	6.7	07/25/03	56.1	52.1	4.1		
530211-Deer Creek			06/26/03	10/01/03	07/28/03	57.8	09/30/03	44.7	07/18/03	7.3	07/29/03	57.4	50.8	6.5		
530212- Twelvemile Cr Below CC CG Rd			06/26/03	10/05/03	07/27/03	67.0	10/04/03	40.5	07/18/03	14.2	07/29/03	66.3	53.5	12.8		
530213-Rock Creek Mouth			06/26/03	10/05/03	07/18/03	58.9	07/04/03	42.1	07/18/03	15.3	07/19/03	58.4	43.9	14.5		
530214-Twelvemile Cr Below Rock Cr			06/26/03	10/05/03	07/22/03	64.7	10/04/03	43.6	07/18/03	14.6	07/20/03	64.1	50.1	14.0		
530215-Ward Cr Mainstem			06/27/03	10/05/03	07/23/03	56.6	10/04/03	41.3	07/30/03	6.1	07/21/03	56.3	50.8	5.5		
530216-North FK of Little Joe Creek			06/27/03	10/06/03	07/24/03	57.8	10/04/03	43.6	07/04/03	4.5	07/25/03	57.4	54.3	3.1		
530217-Little Joe Creek			06/27/03	10/06/03	07/22/03	52.2	10/04/03	41.6	07/20/03	8.4	07/20/03	52.0	44.0	8.0		
530218-St Regis at USGS			06/27/03	10/06/03	07/22/03	69.0	10/04/03	44.1	07/10/03	11.9	07/20/03	68.1	57.1	11.0		
530219-Twin Creek			06/27/03	10/01/03	07/22/03	72.3	09/30/03	42.2	07/04/03	19.1	07/29/03	71.5	54.6	16.9		
530220-St Regis River			47 25.443	115 38.260	06/24/03	09/30/03	07/31/03	64.1	09/30/03	41.0	07/31/03	14.7	07/29/03	63.7	49.9	13.9
530221-St Regis At Taft			47 25.145	115 36.136	06/24/03	09/30/03	07/22/03	63.8	06/25/03	41.6	07/15/03	15.2	07/20/03	63.2	49.3	13.9
530222-St Regis Below Randolph			47 24.972	115 34.863	06/24/03	09/30/03	07/22/03	65.3	06/24/03	41.8	07/18/03	15.8	07/20/03	64.5	49.7	14.8
530223-St Regis Near Haugen			47 23.646	115 26.077	06/24/03	09/30/03	07/22/03	71.1	09/30/03	43.3	07/15/03	17.9	07/29/03	70.4	53.9	16.5
530224-Big Creek			47 21.733	115 25.671	06/25/03	09/30/03	07/22/03	59.0	09/30/03	43.1	06/29/03	10.9	07/20/03	58.7	49.6	9.1
53028-Big Creek Mainstem					06/25/03	10/01/03	10/01/03	75.9	09/30/03	41.9	10/01/03	33.5	07/29/03	65.6	49.4	16.2
5325-W Fork Big Creek					06/26/03	09/30/03	07/22/03	65.8	09/30/03	43.0	07/15/03	14.3	07/20/03	65.1	52.2	12.9
5329-Middle Fork Big Creek					06/26/03	09/30/03	08/07/03	62.9	09/22/03	41.1	08/10/03	12.1	07/29/03	62.5	51.1	11.4
5333- E Fork of Big Creek					06/25/03	09/30/03	07/27/03	61.8	06/25/03	41.9	07/30/03	10.7	07/29/03	61.4	51.6	9.9
578061-St Regis Below Deer Creek			47 21.847	115 19.747	06/26/03	10/01/03	07/22/03	64.3	06/26/03	46.9	07/18/03	12.4	07/20/03	63.7	51.8	11.9
578167-Twelvemile Above Mineral MTN			47 26.027	115 14.543	06/26/03	10/05/03	07/30/03	64.5	10/04/03	39.6	07/30/03	14.1	07/29/03	63.7	51.2	12.5
578177-Twelvemile Above Flat Rock	47 23.734	115 15.363	06/26/03	10/05/03	07/27/03	65.2	10/04/03	40.5	07/15/03	13.7	07/29/03	64.7	52.4	12.2		
584730-Twelvemile Cr Above CC	47 22.676	115 15.394	06/26/03	10/05/03	07/27/03	65.1	10/04/03	40.4	07/18/03	13.2	07/29/03	64.4	52.6	11.8		

2003 Temperature Summary Data (continued)

Site Name	Days > 50 F	Days > 59 F	Days > 70 F	Hours > 50 F	Hours > 59 F	Hours > 70 F	Warmest day of 7- day max		
							Date	Maximum	Minimum
233641-Flat Rock Creek At Mouth	81	26	1	1557.5	129.0	8.0	07/22/03	61.6	51.2
233682-Ward Creek-Upper	77	1	1	1459.5	7.5	7.0	07/23/03	56.9	52.2
233683-S. FK Little Joe Above Mouth	32	4	3	159.0	68.0	11.0	10/07/03	71.0	45.5
472546-ST REGIS ABOVE WARD CREEK	24	23	1	551.0	216.5	1.0	07/20/03	70.4	51.8
480933-Savenac Cr. Above Nursery	22	14	0	434.5	62.0	0.0	07/17/03	64.4	52.5
530205-Big Sunday Creek	84	20	0	1482.0	43.0	0.0	08/01/03	60.5	52.1
530206-Silver Creek at F.B.	88	46	0	1645.0	306.5	0.0	08/01/03	64.6	52.4
530207-E FK Savenac Creek	56	0	0	947.5	0.0	0.0	08/01/03	53.0	50.2
530209-E. Fork Twin Creek	82	0	0	1497.5	0.0	0.0	08/01/03	56.3	52.2
530210-Deer Cr Above DNRC	79	0	0	1499.0	0.0	0.0	07/22/03	56.2	51.8
530211-Deer Creek	89	0	0	1247.5	0.0	0.0	07/27/03	57.8	51.4
530212- Twelvemile Cr Below CC CG Rd	97	66	0	1806.0	499.0	0.0	07/27/03	67.0	54.4
530213-Rock Creek Mouth	100	0	0	811.0	0.0	0.0	07/18/03	58.9	43.5
530214-Twelvemile Cr Below Rock Cr	102	52	0	1518.0	245.5	0.0	07/22/03	64.7	50.3
530215-Ward Cr Mainstem	74	0	0	1299.0	0.0	0.0	07/22/03	56.6	51.1
530216-North FK of Little Joe Creek	78	0	0	1685.0	0.0	0.0	07/23/03	57.8	54.2
530217-Little Joe Creek	57	0	0	204.5	0.0	0.0	07/20/03	52.2	43.8
530218-St Regis at USGS	102	73	0	2206.5	907.5	0.0	07/22/03	69.0	57.828
530219-Twin Creek	96	74	19	1978.5	851.5	58.5	07/27/03	72.0	55.3
530220-St Regis River	93	44	0	1467.0	240.5	0.0	07/31/03	64.1	49.4
530221-St Regis At Taft	95	37	0	1489.5	181.0	0.0	07/22/03	63.8	49.7
530222-St Regis Below Randolph	96	50	0	1550.0	293.5	0.0	07/22/03	65.3	50.2
530223-St Regis Near Haugen	99	72	12	2004.0	747.5	22.5	07/27/03	70.8	54.5
530224-Big Creek	95	1	0	1237.0	1.0	0.0	07/22/03	59.0	49.8
53028-Big Creek Mainstem	98	64	1	1501.5	359.0	5.5	08/01/03	66.4	49.4
5325-W Fork Big Creek	88	55	0	1756.5	442.0	0.0	07/22/03	65.8	53.1
5329-Middle Fork Big Creek	91	41	0	1442.0	161.5	0.0	08/01/03	62.9	51.1
5333- E Fork of Big Creek	93	32	0	1538.0	113.5	0.0	07/27/03	61.8	52.2
570861-St Regis Below Deer Creek	98	46	0	2272.0	285.5	0.0	07/22/03	64.3	52.4
58167-Twelvemile Above Mineral MTN	91	43	0	1459.0	170.0	0.0	07/27/03	64.5	51.8
578177-Twelvemile Above Flat Rock	94	52	0	1671.0	342.0	0.0	07/27/03	65.2	53.3
584730-Twelvemile Cr Above CC	94	53	0	1738.5	380.5	0.0	07/27/03	65.1	53.5

2002 Temperature Summary Data

Site Name	Latitude	Longitude	Start Date	Stop date	Seasonal Maximum		Seasonal Minimum		Seasonal Max ΔT		7-Day averages			
					Date	Value	Date	Value	Date	Value	Date	Maximum	Minimum	ΔT
530219-TWIN CREEK	47 22.629	115 20.975	07/23/02	09/30/02	07/25/02	66.1	09/22/02	39.4	08/13/02	16.3	07/26/02	63.7	52.4	11.2
530220- EF TWIN CR 2002	47 24.635	115 19.995	07/23/02	10/01/02	07/25/02	55.0	10/01/02	42.7	08/03/02	4.7	07/26/02	53.7	50.7	3.0
5325- WF BIG CR 2002	47 22.124	115 27.044	07/19/02	09/30/02	07/25/02	61.2	09/22/02	41.1	07/22/02	11.8	07/24/02	60.0	50.0	10.0
5333- EF BIG CREEK 2002	47 21.499	115 25.866	07/18/02	09/30/02	07/25/02	57.5	09/22/02	41.1	07/22/02	8.9	07/24/02	56.7	49.2	7.5
5329- MF BIG CREEK 2002	47 21.165	115 25.269	07/18/02	09/30/02	07/25/02	57.5	09/22/02	38.8	08/13/02	10.6	07/23/02	56.3	48.1	8.2
530218-ST REGIS RIVER @USGS GAGE 2002			07/26/02	10/02/02	07/26/02	63.2	10/02/02	43.6	08/09/02	10.7	08/15/02	61.6	52.0	9.6
530217-LITTLE JOE CR-MOUTH 2002			07/26/02	10/01/02	07/30/02	51.9	10/01/02	42.1	08/14/02	7.5	08/15/02	50.9	43.8	7.2
530216 NF LITTLE JOE AT TRAIL			07/19/02	10/01/02	07/25/02	55.3	10/01/02	41.6	08/10/02	3.6	07/23/02	54.5	51.6	2.9
530215 WARD CR			07/19/02	10/01/02	07/26/02	55.5	09/22/02	41.6	08/01/02	5.3	07/23/02	55.1	51.1	4.0
530214TWELVE MILE CR-MOUTH			07/19/02	10/01/02	07/25/02	60.6	09/21/02	41.4	08/01/02	13.7	07/23/02	59.5	49.0	10.5
530212 EFTWELVE MILE Cr Above mouth	47 22.085	115 15.462	07/19/02	10/01/02	07/20/02	48.3	09/22/02	41.9	07/21/02	2.2	07/22/02	48.1	46.3	1.8
530211 TWELVE MILE CR			07/19/02	10/01/02	07/24/02	62.6	09/22/02	39.3	08/13/02	12.0	07/23/02	61.6	51.4	10.1
530213 ROCK CR MOUTH			07/19/02	10/01/02	07/22/02	62.0	09/22/02	42.1	08/01/02	17.9	07/23/02	60.9	44.9	16.0
530209 DEER CR			07/19/02	10/01/02	07/25/02	56.6	09/22/02	43.8	08/13/02	7.2	07/25/02	55.9	50.9	5.0
BIG CR AT FOREST BOUNDARY			07/18/02	09/30/02	07/24/02	62.0	09/22/02	42.2	08/13/02	14.0	07/23/02	61.0	49.7	11.3
SILVER CR AT LAKE OUTLET	47 21.685	115 33.883	07/18/02	09/30/02	07/18/02	66.9	09/30/02	48.5	09/11/02	9.1	08/28/02	64.5	58.4	6.1
BIG SUNDAY CR(MOUTH)			07/18/02	09/30/02	07/25/02	56.6	09/22/02	40.1	08/13/02	7.8	07/25/02	55.5	49.6	5.9
SILVER CR @FOREST BOUNDARY			07/18/02	09/30/02	07/24/02	60.0	09/22/02	39.5	08/13/02	10.9	07/23/02	58.6	49.7	8.9
SF Little Joe Cr Above Mouth			07/19/02	10/01/02	09/13/02	60.8	09/22/02	37.4	09/24/02	18.4	09/22/02	55.7	39.9	15.8
St Regis R above Saltese	47 24 42	115 30 55	07/18/02	09/30/02	08/28/02	72.3	09/22/02	41.1	08/12/02	26.2	08/12/02	63.4	47.2	16.2
Flat Rock Cr-mouth			07/19/02	10/01/02	07/24/02	59.0	09/22/02	39.7	08/01/02	9.5	07/23/02	58.1	50.2	8.0
MFSavenac Cr above F.B.	47 25.766	115 23.076	07/23/02	10/01/02	07/25/02	51.9	10/01/02	41.9	08/03/02	3.1	07/26/02	51.1	49.3	1.9
SAVANAC CR above NURSERY			07/23/02	09/30/02	07/25/02	61.8	09/22/02	40.8	08/13/02	11.2	07/26/02	59.9	51.8	8.0

2002 Temperature Summary Data (continued)

Site Name	Days > 50 F	Days > 59 F	Days > 70 F	Hours > 50 F	Hours > 59 F	Hours > 70 F	Warmest day of 7- day max Date	Maximum	Minimum
530219-TWIN CREEK	68	43	0	1204.0	248.0	0.0	07/24/02	66.1	52.5
530220- EF TWIN CR 2002	49	0	0	547.0	0.0	0.0	07/24/02	55.0	50.8
5325- WF BIG CR 2002	64	7	0	1016.5	30.5	0.0	07/24/02	61.2	50.3
5333- EF BIG CREEK 2002	63	0	0	748.5	0.0	0.0	07/24/02	57.5	49.4
5329- MF BIG CREEK 2002	63	0	0	579.0	0.0	0.0	07/24/02	57.5	48.6
530218-ST REGIS RIVER @USGS GAGE 2002	65	34	0	1425.0	197.0	0.0	08/14/02	62.9	53.6
530217-LITTLE JOE CR-MOUTH 2002	21	0	0	56.5	0.0	0.0	08/14/02	51.6	44.1
530216 NR LITTLE JOE AT TRAIL	49	0	0	823.5	0.0	0.0	07/25/02	55.3	52.5
530215 WARD CR	46	0	0	548.0	0.0	0.0	07/24/02	55.5	51.3
530214TWELVE MILE CR-MOUTH	67	4	0	703.5	13.0	0.0	07/24/02	60.6	48.6
530212 EFTWELVE MILE Cr Above mouth	0	0	0	0.0	0.0	0.0	07/19/02	48.3	47.2
530211 TWELVE MILE CR	65	12	0	1069.0	51.5	0.0	07/24/02	62.6	51.9
530213 ROCK CR MOUTH	72	26	0	604.5	78.0	0.0	07/20/02	62.0	45.2
530209 DEER CR	63	0	0	764.5	0.0	0.0	07/25/02	56.6	51.3
BIG CR AT FOREST BOUNDARY	71	28	0	954.5	81.0	0.0	07/24/02	62.0	49.9
SILVER CR AT LAKE OUTLET	74	58	0	1775.0	710.0	0.0	08/28/02	66.0	58.3
BIG SUNDAY CR(MOUTH)	60	0	0	648.5	0.0	0.0	07/24/02	56.6	49.6
SILVER CR @FOREST BOUNDARY	64	2	0	872.5	7.5	0.0	07/24/02	60.0	50.2
SF Little Joe Cr Above Mouth	46	3	0	226.5	3.0	0.0	09/19/02	59.1	41.0
St Regis R above Saltese	70	20	3	1120.5	74.5	2.0	08/12/02	72.3	46.1
Flat Rock Cr-mouth	61	1	0	779.5	1.5	0.0	07/24/02	59.0	50.6
MFSavenac Cr above F.B.	13	0	0	97.0	0.0	0.0	07/25/02	51.9	49.7
SAVANAC CR above NURSERY	61	7	0	1063.0	22.0	0.0	07/25/02	61.8	52.8

2001 Temperature Summary Data

Site Name	Latitude	Longitude	Start Date	Stop date	Seasonal Maximum		Seasonal Minimum		Seasonal Max ΔT		7-Day averages			
					Date	Value	Date	Value	Date	Value	Date	Maximum	Minimum	ΔT
St Regis River @ USGS gage	N47 17 47.19	W115 07 19.89	07/14/01	10/18/01	08/07/01	69.8	10/06/01	41.8	08/06/01	12.6	08/08/01	68.5	56.8	11.7
Little Joe Cr @ mouth	N47 17 47.74	W115 07 20.31	07/14/01	10/18/01	08/07/01	53.8	10/18/01	42.1	08/06/01	8.1	08/09/01	53.4	45.8	7.7
N Fk Little Joe Cr @ Rd 282 under trail bridge	N47 15 40.88	W115 10 35.89	07/14/01	10/18/01	08/13/01	56.6	10/18/01	39.3	08/02/01	3.6	08/15/01	56.0	53.4	2.6
Ward Cr @ mouth	N47 18 32	W115 14 09	07/14/01	10/18/01	08/07/01	55.1	10/06/01	39.0	07/27/01	6.1	08/08/01	54.5	49.4	5.1
Twelve Mile Cr @ mouth	N47 21 14.60	W115 17 19.23	07/17/01	10/18/01	08/07/01	64.2	10/18/01	41.5	07/27/01	12.9	08/08/01	63.5	52.0	11.6
Twelve Mile Cr @ Cabin City Campground	N47 22 19.03	W115 15 41.02	07/17/01	10/18/01	08/07/01	67.2	10/06/01	35.3	08/26/01	14.0	08/08/01	66.1	53.1	13.0
Rock Cr @ mouth (Twelve Mile Cr trib)	N47 21 15.78	W115 17 18.38	07/17/01	10/18/01	08/27/01	68.1	10/05/01	37.2	08/29/01	21.5	08/08/01	66.1	47.4	18.8
Deer Cr @ mouth	N47 22 25.74	W115 21 32.63	07/19/01	10/18/01	08/07/01	57.9	10/18/01	42.3	07/27/01	7.5	08/09/01	57.3	50.1	7.2
Big Cr @ Sect 27 bridge crossing	N47 22 24.71	W115 23 54.38	07/19/01	10/18/01	08/07/01	66.3	10/05/01	36.8	08/26/01	18.2	08/08/01	65.4	48.4	17.0
Silver Cr below lake	N47 21 41.08	W115 33 54.01	07/20/01	10/09/01	08/14/01	72.6	10/09/01	47.5	09/11/01	9.9	08/15/01	71.3	63.7	7.6
Sunday Cr @ mouth	N47 23 51.84	W115 31 14.07	07/20/01	10/09/01	08/07/01	58.6	10/06/01	37.1	07/27/01	8.1	08/09/01	57.8	50.6	7.2
Silver Cr @ FS boundary	N47 24 17.12	W115 30 48.15	07/20/01	10/09/01	08/07/01	63.1	10/06/01	35.6	07/27/01	12.6	08/09/01	62.1	50.6	11.5
SF Little Joe near mouth	N47 16 12.13	W115 08 30.91	07/14/01	10/18/01	07/14/01	48.8	10/05/01	43.3	07/27/01	3.0	08/08/01	48.3	45.8	2.5
St Regis R. abv Saltese, MT	N47 24 41.82	W115 30 54.68	07/21/01	10/09/01	08/07/01	67.3	10/06/01	38.0	08/06/01	15.6	08/08/01	65.9	51.6	14.3
Flat Rock Cr near mouth	N47 23 14.77	W115 14 52.25	07/17/01	10/18/01	08/07/01	60.7	10/06/01	35.7	07/27/01	10.6	08/08/01	59.8	51.0	8.8
Savenac Cr near mouth?	N47 23 55.42	W115 23 40.41	07/19/01	10/18/01	08/07/01	67.3	10/06/01	37.1	08/26/01	14.6	08/09/01	66.1	52.3	13.9

2001 Temperature Summary Data (continued)

Site Name	Days > 50 F	Days > 59 F	Days > 70 F	Hours > 50 F	Hours > 59 F	Hours > 70 F	Warmest day of 7-day max		
							Date	Maximum	Minimum
St Regis River @ USGS gage	83	58	0	1850.0	614.0	0.0	08/07/01	69.8	57.7
Little Joe Cr @ mouth	61	0	0	293.0	0.0	0.0	08/07/01	53.8	46.0
N Fk Little Joe Cr @ Rd 282 under trail bridge	63	0	0	1283.0	0.0	0.0	08/13/01	56.6	54.4
Ward Cr @ mouth	52	0	0	652.7	0.0	0.0	08/07/01	55.1	49.8
Twelve Mile Cr @ mouth	80	32	0	1349.0	148.5	0.0	08/07/01	64.2	52.4
Twelve Mile Cr @ Cabin City Campground	78	39	0	1397.5	275.0	0.0	08/07/01	67.2	53.8
Rock Cr @ mouth (Twelve Mile Cr trib)	85	49	0	1316.5	370.0	0.0	08/07/01	67.2	47.6
Deer Cr @ mouth	67	0	0	815.0	0.0	0.0	08/07/01	57.9	50.4
Big Cr @ Sect 27 bridge crossing	77	45	0	963.5	219.5	0.0	08/07/01	66.3	48.8
Silver Cr below lake	80	73	10	1902.5	1172.0	33.5	08/14/01	72.6	63.8
Sunday Cr @ mouth	63	0	0	827.0	0.0	0.0	08/07/01	58.6	51.1
Silver Cr @ FS boundary	70	22	0	1012.0	116.0	0.0	08/07/01	63.1	51.3
SF Little Joe near mouth	0	0	0	0.0	0.0	0.0	08/05/01	48.5	45.8
St Regis R. abv Saltese, MT	75	41	0	1336.5	307.5	0.0	08/07/01	67.3	52.5
Flat Rock Cr near mouth	66	13	0	1013.5	33.0	0.0	08/07/01	60.7	51.5
Savenac Cr near mouth?	77	41	0	1389.0	273.0	0.0	08/07/01	67.3	53.1